

**TRANS-LAKE WASHINGTON PROJECT
ADVISORY COMMITTEE
NORTH BELLEVUE SENIOR CENTER, BELLEVUE
JANUARY 9, 2002 — 4:00 P.M. – 7:00 P.M.**

The Advisory Committee of the Trans-Lake Washington Project met on January 9, 2002. Discussion focused on the identification of alternatives to move forward into the project EIS, and feedback was sought on roadway and high-capacity transit (HCT) alternatives specifically. All input received will be provided to the Executive Committee as they reach their own recommendations on the EIS alternatives. Advisory Committee members not present on January 9 were contacted to solicit their input on the alternatives and that input is included in this summary.

Of the 16 representatives offering feedback, there were the following general levels of agreement:

- There was near unanimity on the inclusion of a substantial TDM investment, with pricing, in the EIS. Pricing should be considered on a regional basis, but applicable to the SR 520 corridor. Some suggested looking into demand management cost effectiveness.
- There was broad support for adding HCT on SR 520, in the form of a combined HOV/BRT system with direct access. There was some support for changing that vision to fixed-guideway HCT on SR 520. Several people spoke in favor of not precluding long-term potential for fixed-guideway transit in the SR 520 corridor.
- There was near unanimity for analyzing a 4-lane alternative in the EIS.
- There was near unanimity for analyzing a 6-lane alternative in the EIS. Many spoke in favor of adding an HOV lane to SR 520.
- Support for analyzing an 8-lane alternative in the EIS was mixed, roughly evenly as pertains to the currently defined 8-lane alternatives.
- There was considerable support for lids to connect communities with added pedestrian pathways, though primarily of limited size and without ventilation.

Input received from each attendee is summarized below.

ADVISORY COMMITTEE FEEDBACK

Eugene Wasserman, Neighborhood Business Council

- Supports carrying forward the 4-lane, 6-lane, and 8-lane facilities for the EIS.
- The 6-lane facility with the GP/HOV lane combination would help clear up congested areas in the Seattle neighborhoods.
- Should look at preserving HCT on the SR 520 Corridor for the EIS. Would like to keep the option, when possible for the future, to locate a fixed guideway structure on SR 520.

- Concerned about the cost of lids, but recommends looking at placing a few, smaller, non-ventilated lids.
- The project should study the possibility of another transit tunnel in downtown Seattle to connect to SR 520 HCT.
- Concerned with the project including HCT, when regional projects do not forecast this being built for another 15 years.

Bertha Eades, Redmond

- Does not recommend any of the alternatives, including the 4-lane facility. Suggests carrying forward an alternative of her own, which includes adding two-way bicycle/pedestrian facilities and an HOV lane in each direction.
- Does not support adding GP lanes because in the long-term this would attract traffic from other areas.
- Supports SR 520 HCT, with the possibility of elevating this in areas on the land and not on the floating bridge portion. Does not support BRT due to the lane using up additional land. HCT should have a direct route to Redmond with a branched route to Bellevue in order to serve the demand of the areas.
- Concerned that the Mercer Island community would not give up the center lanes, which is required for certain alternatives in the I-90 two-way transit project.
- Supports lids with pedestrian access to connect the neighborhoods. Recommends looking at wide bridges with exclusive use for pedestrians.
- Does not support including pricing in the EIS, as it detracts from the problems.

Kingsley Joneson, Portage Bay/Roanoke Park Community Council

- Supports the 4-lane and 6-lane facility for the EIS.
- Has no preference on the HOV lane or a combined HOV/BRT lane with a four-foot buffer.
- Does not support any alternatives that would impact the neighboring streets or take up residential property.
- Lids will be needed in neighborhoods, although it is difficult to make recommendations without specific details on the placement, shape and sizes of the lids.
- Should look at noise reduction strategies. The noise studies should include added noise impacts from the future addition of a Sound Transit bridge over the Ship Canal.
- Uneasy about the possible closure of the Boylston on-ramp and the Lakeview off-ramp.
- Recommends that pricing be studied further.

Peter Hurley, Transportation Choices Coalition

- Confused about the pricing assumptions, although supports looking at pricing strategies.
- The 4-lane and 6-lane facility should be studied in the EIS.
- Does not support the 8-lane facility with the HOV/GP lanes, as there would not be enough money to build this and there would be permitting difficulties.
- Supports the BRT/HOV lane option and looking at adding an HOV lane.
- Not persuaded that we need to study a HCT/fixed guideway for SR 520. Should study HCT on SR 520 in the future.

- Supports the addition of lids to connect the communities with bicycle/pedestrian facilities and looking at possible uses on the lid, especially for development opportunities. Lids should be designed up front.
- TDM should be in a regional package, but project-funded. Encourages the project to look at innovative and performance based TDM. The State of Washington is looking at demand management cost effectiveness, which should be focused in this project. Promotes the development of a new TDM industry that invites cost effectiveness.
- Would like all the regional projects, such as the Alaskan Way Viaduct project and the I-405 Project, to compile a regional budget with coordinated transportation improvements.

Mark Weed, Fisher Properties Inc.

- Supports analyzing the 4-lane, 6-lane, and 8-lane facilities.
- Recommends the addition of HOV lanes on SR 520.
- The addition of HOV and GP lanes (8-lane facility) needs to be analyzed, although this may not be required in the entire SR 520 Corridor, especially in the Montlake and Portage Bay areas. The eastside communities are supporting an 8-lane facility.
- HCT/fixed guideway design should be looked at in anticipation of the future. The project should learn from the difficulties on I-90.
- The BRT/HOV combination with a four-foot buffer should be studied. BRT should be preserved for the future. Supports adding a lane dedicated to rubber-tired HCT vehicles.
- Lids are only one portion of the various mitigation strategies. Does not want to see Mercer Island scale lids that would require ventilation for this project. Suggests carrying forward sounder solutions with less costs and more benefits.
- Not sure TDM really works, but recommends that it be looked at in the EIS.
- Look at pricing and adding a toll on the SR 520 bridge.
- What has happened to the early action implementations?

Jean Amick, Laurelhurst Community Club

- The 4 and 6-lane facilities should be analyzed for environmental review.
- Supports the HOV/BRT with a four-foot buffer alternative.
- Has a southbound HOV lane on Montlake Boulevard been looked at?
- Encourages HCT to be looked at for the I-90 corridor and discourages preserving HCT for SR 520. Placing HCT on SR 520 would cause impacts to local streets, especially increasing traffic impacts.
- Supports adding lids without ventilation.
- TDM should be studied further regionally.
- Recommends analyzing pricing strategies.
- Concerned with noise impacts moving across Lake Washington to the Laurelhurst neighborhood.
- Does not support an 8-lane facility due to the potential damage incurred to the environment and to local streets.
- Has there been an early action report completed two years ago?
- Would rather see the \$50 million in next budget for SR 520 to "study" more about resurfacing the east-end of the SR 520 bridge, putting glare shields on the bridge to prevent

rubbernecking, and resurfacing on I-5, north of NE 45th (thus, keeping what we already have "preserved" than creating more we cannot maintain properly). Facing the Alaskan Way Viaduct crisis and building I-405, which is already further in the pipeline, WSDOT must prioritize and hold these other needs as much more urgent.

- WSDOT must follow through on the 1999 early action item re: Montlake Bridge openings hours. The University of Washington has successfully communicated with the Coast Guard and got the bridge to be kept down during a football game (Michigan this fall). WSDOT should be able to follow through on the Montlake Bridge early action within two years. Also, using the electronic sign on SR 520 to warn users of when the Montlake Bridge is up should be added to the early action items.
- An additional bridge added over the east end of the Montlake Cut should not be studied, only study the tunnel under the Montlake Cut.

Jim Reckers, Eastlake Community Council

- Does not see how anything other than the existing situation would maintain the livability in the Eastlake area. Recommends doing nothing.
- Concerned that the I-5 interchange options would impact the Eastlake neighborhood.
- Does not approve of removing the southbound Boylston Street on-ramp and Lakeview off-ramp.
- Lids may cause increased amount of noise in certain spots, due to a noise magnification effect. Recommends adding a wider lid near the Seward School area.
- Does not recommend looking at the Safety and Preservation alternative.
- Would like to have the positive incentives for the Eastlake community on each alternative presented, so that he can share this with his neighbors.
- Supports TDM and pricing strategies.

Elizabeth Newstrum, Town of Yarrow Point

- Recommends looking at mitigation during construction, especially concerning runoff around the Wetherill Nature Preserve. The Town of Yarrow Point has named the Wetherill Nature Preserve a critical area. Does not support anything that encroaches on the Wetherill Nature Preserve.
- Would like a more detailed plan for the interchanges and overpasses made available, especially for the time during construction. The overpasses are the life lines for the Yarrow Point community, providing many services, such as electricity.
- The 4-lane facility and no action should be studied further, although this would not answer the purpose and need.
- Do not reopen or encroach into Points Drive.
- Should look at lids for community connectivity, but do not look at lids with ventilation as they impose impacts.
- A 6-lane facility should be studied as long as it complies with the above restrictions (not disturbing Wetherill Nature Preserve and Points Drive).
- Does not support studying an 8-lane facility for the EIS.
- Should not look at light rail transit, although HCT should be preserved for SR 520. Would like more information on the range of possible fixed guideway methods.

- Recommends looking at a progressive toll across the entire SR 520 corridor.
- The BRT/HOV combination with management should be examined.
- Supports studying congestion pricing.

Fred Hart, Greater University Chamber of Commerce

- Supports lids without ventilation due to community connectivity reasons.
- Recommends examining TDM with regional pricing strategies. Should look at tolls and pricing.
- Should study the 4-lane facility.
- The 6-lane facility should be studied with HOV lanes added.
- The 8-lane facility Montlake interchange should be included in the final alternative.
- Supports SR 520 HCT preservation with an additional HOV lane.
- Supports a second Montlake crossing and thought that BRT could possibly access this.

Virginia Gunby, 1000 Friends of Washington

- Supports a 4-lane facility.
- The 6-lane facility should be analyzed with HOV lanes added.
- Recommends a flexible TDM package for every alternative and to begin the TDM during construction phase.
- In favor of pricing and would like a 15% trip reduction.
- Would like to see HCT on the I-90 Corridor.
- Does not support analyzing an 8-lane facility.
- Strongly promotes looking at TDM for the I-90 Corridor.
- Supports looking at lids without ventilation to enhance community connectivity in a judicious manner. Noise mitigations should be added to the Portage Bay/Roanoke area.
- The HOV/BRT concept should have managed HOV occupancy, based on speed. GP lanes should be converted to HOV mode during peak hours.
- Would like the pontoons on the rebuilt SR 520 bridge to be strong enough to handle light rail and possible stacking.

John Resha, Greater Redmond TMA

- Supports the 4-lane facility.
- Recommends the 6-lane facility with the addition of the combined BRT/HOV option.
- Needs more information to make a decision on the 8-lane facility.
- HCT should be built in the SR 520 corridor.
- Suggests adding BRT in the I-90 corridor.
- Favors looking at lids without ventilation.
- TDM should be looked at regionally.
- Advocates pricing through managed lanes or tolls.

Barbara Culp, Bicycle Alliance of Washington

- The 4-lane and 6-lane facility should be studied.

- Mitigation for bicycle/pedestrian facilities should be examined, such as looking at adding a bicycle overpass to Madison Park. Mitigation should be looked at according to NEPA 4 (F) regulations.
- Supports adding HCT on the SR 520 corridor.
- Concerned with what happens when the HOV/BRT option connects to streets.
- How would bicycles access through lids?
- Recommends looking at lids if they are not excessive in length and do not require ventilation.
- TDM and pricing methods should be carried forward for EIS study.

Janet Ray, AAA Washington

- TDM should be looked at regionally and should include TSM and ITS management methods.
- Pricing should also be looked at regionally rather than on a project basis.
- Supports looking at the 4-lane and 6-lane facilities for the EIS.
- HOV/BRT should be studied in separate lanes.
- Supports Jim MacIsaac's proposal. Should look at adding a lane only on the bridge portion of SR 520.
- Concerned that this project will not be able to accomplish anything due to the huge cost.
- The population on eastside will not support HCT, therefore does not recommend looking at HCT further.
- Supports lids in proportion to project.

Gregory Hill, Streeter Architects, Wallingford

- Supports a 4-lane facility with light rail transit in I-90.
- Recommends looking at a 6-lane facility.
- Only supports the BRT/HOV concept if they are separate facilities off the bridge portion.
- Examine HCT as a separate facility. The addition of HCT may cause additional growth around the access points. HCT should be placed in the center of the roadway. Trains to the University District, Bellevue, and Redmond are needed.
- Supports HOV with HCT. Recommends making the HOV lane a managed lane.
- Does not support the 8-lane facility. Questions the 8-lane facility model accuracy and is concerned with the impacts to Seattle streets.
- The TDM program as it is done today would not work.
- Encourages looking at pricing methods.
- Supports a bicycle route from Madison Park to the University District.
- Advocates lids that are landscaped, with pedestrian/bicycle connections.

Rich White, Boeing Company

- Supports carrying forward the 4-lane, 6-lane, and 8-lane facilities for the EIS.
- Should evaluate the BRT/HOV combined lane and the HOV lane alternatives.
- The state of Washington has under funded the infrastructure and this greatly affects the Boeing Company along with other companies. Large capital facilities in Washington are not

built to handle the capacity, such as I-5, transit, and SR 520. Transportation difficulties cost Boeing more money to ship parts and affects employee quality of life.

- Recommends adding HCT or BRT from Seattle to the Overlake/Redmond area on SR 520. HCT should be added to SR 520 due to more density, residents, and employment around the corridor. HCT should be added to both the SR 520 and I-90 corridors.
- Suggests carrying forward TDM.
- Pricing should be a part of a larger regional program, not on a project-by-project basis. Recommends looking at transportation in a holistic manner. Projects would affect other adjoining projects.
- It is premature to discuss lids without knowing what we are getting out of the project. The bigger the project, the more lids should be added. Should look at cost effectiveness with the addition of lids. If the project carries forward the 8-lane facility or larger than it should look at adding ventilated lids.

Bob Dent, Hunts Point

- Supports carrying forward the 4-lane, 6-lane, and 8-lane facilities for the EIS. Although it will be easier to study an 8-lane facility and to build the 6-lane facility, than the reverse.
- Suggests for the 8-lane facility to include BRT or HCT exclusive lane and in the 6-lane configuration this should be combined with an HOV lane.
- The fixed guideway should be evaluated in the SR 520 corridor, while keeping options open for alternative technologies.
- TDM and pricing should both be evaluated.
- Shorter lids without ventilation should be looked at.

ADDITIONAL COMMENTS NOT FACTORED INTO SUMMARY

To: Members of the Trans Lake Washington Advisory Committee, and supporting staff members

From: Jean Leed, Seattle Representative for Montlake

Date: January 6, 2002

Due to business travel out of town, I am unable to attend our final meeting on January 9 and am therefore conveying my thoughts and recommendations by letter. It is my understanding that the questions we will be asked to comment on are the same ones developed for the Technical Committee at its final meeting on December 12, 2001, so responses to them compose the bulk of my letter.

I have served as the Montlake liaison to the Trans Lake Committee since June 1997. I joined because I believe this is our region's last chance for significant changes in the SR 520 corridor (which passes directly through the Montlake neighborhood), and I want to encourage a long-term view. We won't have another chance for significant change in the corridor during our lifetimes.

Based on the resolutions passed by the Community Club and the comments I have received from Montlake community members during that period, I can attest that there is a high level of support here for developing other modes of travel in the SR 520 corridor besides single occupancy vehicles (SOV's). Most residents favor reducing dependence on cars, while recognizing that the long-term economic vitality and mobility in this region require public investment in alternative modes of travel: transit, buses, carpooling, bike paths, pedestrian paths, etc.

We are equally concerned that any such changes preserve (and even improve) the quality of life we value: enhancing safety and reliability, reducing noise and air pollution, preserving environmentally sensitive areas, and reunifying communities (such as our own) which are bifurcated by busy freeways and arterials. Thus, here are my comments on the options under consideration for the next phase of the Trans Lake Study.

Transportation Demand Management (TDM): Reducing demand for roads (through both incentives and penalties) is in the long run the cheapest and most effective way to address our transportation needs. The EIS should examine the impact of aggressive Transportation Demand Management, and also Transportation System Management to make travel safer, more reliable, and shorter.

High Capacity Transit (HCT) options:

- HOV/Bus Rapid Transit lanes: Dedicated bus and HOV lanes are the next most cost-effective way to move large numbers of people throughout the region. Currently SR 520 and sections of I-5 through Seattle are the only two major thoroughways without continuous dedicated HOV lanes. However, it is essential that such lanes cannot be converted to general purpose lanes in response to political pressure (*cf.* current efforts to strip I-90 of its dedicated transit lanes). Buses also will congest Seattle arterials once they exit the freeways. I am therefore doubtful that Bus Rapid Transit is a long-term "solution", but it can help in the immediate future.

- Fixed guideway transit on the 520 corridor or on I-90? I-90 still seems the better corridor for rail transit through about 2020 (if that right-of-way can be preserved for transit). By then, however, transit will be needed and viable on both corridors. I am therefore concerned that the upcoming EIS take into consideration the need to preserve right-of-way for future transit (probably exiting from the 520 corridor before it reaches Montlake and going toward the University District).

How many lanes of traffic on SR 520? The current four-lane configuration would have the least impact on the Montlake area. In any case, there should be no more than six road lanes on SR 520, two of which should be dedicated to HOV/bus travel. Any roadway larger than this through residential areas on both sides of the lake would require more land than is available and would do irreparable damage to wetlands and other sensitive areas. It would also increase noise, air pollution, and traffic on streets and arterials beyond the level they can sustain.

Lids: Lidding could provide mitigation for past and potential future impacts of SR 520 in Montlake. There should be further exploration of the possibilities and advantages of lidding in the land-based areas of the corridor. The lids should be short enough not to require ventilation tubes, and long enough to allow for reconnecting neighborhoods through amenities like parks and safe open space.

In sum, these criteria suggest that Options 1 (no change), 2 (four GP lanes, plus bike/ped access), and 3 (four GP and two HOV lanes, plus bike/ped access) should be carried forward in the EIS. Option 7 (adding an HOV/BRT lane and connections to the current four GP lanes) also deserves further study, but only if it could be done within the existing right-of-way. While fixed guideway in the SR 520 corridor (as contemplated in Option 5) is not needed now (assuming transit is built on I-90), I encourage further exploration of providing for the future right-of-way, so that decisions made now do not preclude that possibility later.

The Montlake Community Club has voted against further study of a second crossing of the Montlake Cut, due primarily to environmental concerns and other impacts on local residents. MCC also supports confining any new facility to the existing right-of-way. Traffic impacts on Montlake Boulevard are already beyond capacity, due largely to traffic bound for or exiting from SR 520. Therefore we urge further exploration in the EIS of every possible way to contain and/or mitigate any increase of vehicles on Montlake Boulevard due to changes in the SR 520 corridor.

The Montlake community remains deeply interested in the Trans Lake process and will continue to be highly involved throughout the EIS process and beyond, since any changes in the SR 520 corridor will inevitably impact our community. We do want to thank the TLW consultants for meeting with our community on several occasions to discuss our concerns, and hope for continued cooperation.

To: Amy Grotefendt

From: Bob Tate, Advisory Committee

Re: Identification of Alternatives for Project EIS

While the Advisory Committee is meeting on January 9th, I will be basking in the sun in Mexico. Hence, this note conveying some of my thoughts for consideration. Please include these comments with others submitted by advisory committee members.

PURPOSE OF THE PROPOSED ACTION

The purpose of the proposed action is to *improve mobility for people and goods* across lake Washington within the SR 520 corridor from Seattle to Redmond in a manner that is *safe, reliable, and cost-effective*, while avoiding, minimizing and/or *mitigating impacts on affected neighborhoods* and the *environment*.

APPROACH

- The vitality of the highly populated areas on both sides of Lake Washington requires ready access between the two.
- It is best to provide the commuters with desirable options as opposed to assessing penalties or mandating methods of travel.
- At some point the common good must prevail over individual rights; however, the quality of life for the neighbor should not be forgotten in an attempt to improve the life of the commuter.
- This is the best, and perhaps the only, opportunity to make significant improvements in the 520 corridor in the lifetime of most committee members. Taking full advantage of the opportunity is imperative.

COMMENTS:

- Clyde Hill by the nature of its topography needs/requires special help.
- Include detailed *mitigation and enhancement* plans to correct *impacts on affected neighborhoods* as an integral part of each option. It is important that these plans not ever appear to be an add-on feature and that they be conceived in concert with the communities.

- A prime *safety requirement* is the elimination of “the weave” in both directions. The tunnel concept eliminates much traffic from I-5 altogether and effectively reduces the eight lanes to six lanes east of the Roanoke I-5/520 interchange. The proposed change in overhead ramps can work going west on 520, but I haven’t yet seen the plan or costs for elimination of weave for eastbound traffic.
- Include wide shoulders for *safety* and *reliability* reasons.
- Support Sound Transit recommendation for I-90 light rail plan, with BRT for the 520 corridor.
- Consider shuttle buses to University of Washington from eastside parking lots as per current football game days plan as *TDM measure*.
- Consider regional “hot-lane” concept with use of transponders to record trips and charge to credit card as *TDM measure*.
- Include 4-lane option - Does not meet purpose of study but required in EIS
- Include 6-lane option - HOV lane good for buses and car poolers and perhaps, TDM. However has serious drawbacks: will *improve mobility* by only 3%, congestion will soon surpass today’s level with resulting air pollution and cut-through traffic affecting our community. Limited improvements for average driver or for transport of goods.
- Include eight-lane option (three GP and one HOV/BRT) - Strongly support. Best of plans to improve *mobility, reliability*, and a *safety for people and goods*. Would *reduce neighborhood impacts of air pollution and cut-through traffic* caused by traffic congestion. Best plan for average trans-lake traveler and for anticipated population increase.

From Jim MacIsaac, Eastside Transportation Commission

TO: Trans-Lake Washington Project

> Advisory Committee Members

>

> If you would like to provide your thoughts on the

> following questions to me as soon as possible, we will ensure that they are

> included in what is sent to the Executive Committee.

>

> * How many lanes should be evaluated in the EIS -- 4 lanes, 6 lanes

> (additional HOV lane), and/or 8 lanes (additional HOV and GP lanes)

The study team analyses find that HOV lanes-only achieve only a 5% to 7% increase in person-trips served by 2020 compared to No Action -- less than two years of travel growth given the historical rate of 4% per year in trans-Lake travel growth. If the project mission is to address congestion, we must pursue both GP as well as HOV lanes.

> * If an HOV lane is evaluated in the EIS, should it be evaluated as a

> combined BRT/HOV lane with a 4' buffer between it and the GP lane?

Definitely

> * Should a fixed guideway HCT system be evaluated in the SR 520 or in

> the I-90 corridor?

The study team analyses find that BRT on SR-520 would result in greater total Trans-Lake transit rider increases than are predicted with SR-520 HCT under Alts 5 & 6. The capital cost of HCT would be 10 times greater than BRT. There appears to be NO apparent reason to pursue SR-520 HCT any further (see below).

> If it should be evaluated in the I-90 corridor, should

> the EIS evaluate preservation of HCT in the SR 520 corridor for the future?

No

> * Should TDM be evaluated in the EIS?

I presume it must be. However, TDM should be viewed as a regional pursuit that requires countywide and regionwide policies. I do not believe we should beat it to death on a corridor basis.

> * Should pricing be evaluated in the EIS?

I presume "pricing" means some equivalent of user toll collection. It should be considered if the selected action will improve speed and operation of non-HOV and freight movement in the corridor. This will not occur under Transit/HOV only actions. Therefore, pricing can only be

considered under actions that include new GP lanes that benefit those who will be "priced". A pricing analysis must include a benefit/cost analysis that shows that the cost of pricing is exceeded by the benefits of reduced delay over the entire period of the pricing program.

- > * What type of lids should be evaluated in the EIS? Should longer
- > lids that require ventilation be evaluated or should shorter lids (less than
- > 500') that do not require ventilation?

Short lids only! And only for the 8-lane alternatives. The Mission Statement is to address improving mobility. Lidding is only a mitigation offering if a major improvement in mobility is achieved relative to impact. Doing nothing for non-HOV and freight movement (80% of all person-trips) with transit/HOV-only actions does not significantly address the primary mission.

- > Other

Since Sound Transit has gone on record as not favoring fixed rail HCT on the SR-520 corridor, and since the travel forecasts show fixed HCT as less rider-productive in this corridor than BRT, and since the alternatives that include SR-520 HCT require the widest roadway "footprints" that are opposed by adjoining communities, and since these alternatives are the most costly of all alternatives studied -- I strongly recommend that Alts 5 and 6 be eliminated from further study.

Please remove I-90 LRT from Alternative 2. I-90 LRT is NOT Safety and Preservation. It is properly included in Alts 3 and 4.

I have not yet seen how the inside HOV lanes are expected to improve capacity. All westbound HOVs must weave through the GP lanes to the Arboretum, Montlake and I-5 north off-ramps. Eastbound HOV traffic from I-5 south and particularly the Montlake and Arboretum ramps must weave through the GP lanes to access the HOV lanes, and weave back across the GP lanes to exit on the Eastside. That causes the need for GP lanes to accommodate ALL corridor traffic with increased capacity reduction due to weaving.

My minimum "bottom line" is a well-managed 6-lane facility without HOV lane restrictions that improves Trans-Lake travel for all modes (see the MacIsaac "Phase Action"). If HOV lanes must be so-designated, that drives us to the need for an 8-lane facility that includes 2 added GP lanes. The 8-lane plans that have evolved appear to be DOA on the Seattle end, unless the study team places much more emphasis on improving mobility for all modes of travel.

- > If you have any questions about the above questions or last night's meeting,
- > please do not hesitate to call me at 206-269-5041. Again, please accept my
- > apologies for the missing agenda in advance of the meeting.
- >
- > Amy Grotefendt

> EnviroIssues

>

Thanks Amy for inviting the feedback.

The attached is being circulated in the business communities on both sides of the lake.

Trans-Lake Project: A Phasing Proposal

Summary of Alternatives

By the end of January the Trans-Lake Executive Committee is scheduled to select the alternatives to carry forward into the EIS stage. It will select from eight alternative packages:

- No Action – Continue normal maintenance program.
- Safety and Preservation – Replace and realign the floating bridge and seismically deficient structures; add safety shoulders and bike/ped facilities; implement TDM actions.
- SR-520 HOV & I-90 LRT – Alt 2 plus: Add HOV lanes where missing along the SR-520 corridor; implement an LRT line via I-90 with loosely defined definition of alignment and grade-separation outside the I-90 corridor (6 lanes on SR-520).
- SR-520 HOV & GP and LRT on I-90 – Alt 3 plus one GP lane each way on SR-520 (8 lanes on SR-520).
- SR-520 HOV and SR-520 HCT – Add HOV lanes plus exclusive HCT lanes on SR-520 (equivalent to 8.5 lanes in width on SR-520).
- SR-520 HOV, GP and HCT – Alt 5 plus one GP lane in each direction (equivalent to 10.5 lanes on SR-520).
- SR-520 HOV & BRT – Add HOV lanes to SR-520; implement BRT sharing the HOV lanes (6 lanes on SR-520).
- SR-520 HOV, BRT and GP – Alt 7 plus one GP lane each way (8 lanes on SR-520).

Summary of Performance

The transit performance with HCT would be no better than with BRT, but transit capital costs would be 10 times higher. The highest transit forecast is associated Alternative 8.

Only the alternatives that include added GP lanes would result in an increase in persons served significant enough to warrant any action other than Alt 2 – Safety & Preservation. Sound Transit is strongly advising against fixed rail transit on the SR-520 corridor. Alts 5 and 6 are likely to be dropped from further consideration.

Alternatives 6 (if managed for all modes without HOV lane designations between I-5 and 84th Avenue NE) and 8 are the only remaining action alternatives that reflect any significant potential

Performance Summary

Alt	SR-520 Lanes	Additional Trips Served ¹			Cost Est ² \$millions	Cost per ³ Add Trip
		Transit	Total	% Incr		
1	4	44,900	429,100	Base	\$0	Base
2	4	+ Minor	+ Minor	0.0%	\$1,750	N.A.
3	6	+5,200	+28,300	6.6%	\$6,630	\$16.73
4	8	+9,500	+74,200	17.3%	\$9,130	\$8.79
5	8.5	+400	+13,800	3.2%	\$8,060	\$41.72
6	10.5	+6,200	+84,400	19.7%	\$10,590	\$8.96
7	6	+5,400	+22,200	5.2%	\$4,970	\$15.99
8	8	+11,700	+96,900	22.6%	\$7,150	\$5.27

¹ Total weekday trip increase over No Action (6/6/01 Estimates).

² 6/6/01 estimates including mitigation but excluding lids.

³ Total added trips carried over 40 years divided by Cost.

to reduce the congestion backups on the SR-520 corridor – if congestion reduction is an objective of the corridor action. Alternative 8 would accommodate the highest increase in people AND freight movement in the SR-520 corridor, and would result in the best transit use performance of all alternatives studied.

The Existing Corridor Bottlenecks

The primary problem for the SR-520 corridor is its inadequate bridge capacity to accommodate the existing traffic “feeder” capacity on each side of the lake. That is why we see huge traffic backups on all approach routes to the bridge. A brief review of the existing corridor lane and ramp configurations illustrates this point (see first attached diagram).

The westbound approach at the east end of the bridge already has two GP lanes, an HOV lane and a high-volume ramp (before it was metered) from 84th Avenue. The bridge needs a third westbound lane to accommodate this feeder capacity. One-third of all westbound bridge traffic exits via the Arboretum and Montlake ramps, so the added lane can be terminated at the Montlake off-ramp.

In the eastbound direction, the two eastbound lanes through Montlake plus the Montlake and Arboretum ramps have feeder capacity to fill three eastbound lanes on the bridge. About 35% of all eastbound traffic during the PM peak period enters from these latter two ramps – likely a much higher proportion if the ramps were not so severely metered. During the AM peak nearly 50% of the eastbound bridge traffic enters via these two ramps when the meters (for some reason) are not actuated.

With the bridge bottleneck eliminated, the Portage Bay Viaduct becomes the remaining corridor bottleneck. If the Montlake ramps are to remain fully operational, an auxiliary lane is needed in each direction between the Montlake and I-5 ramps. The Roanoke/I-5 ramp systems have adequate capacity to accommodate the pair of auxiliary lanes.

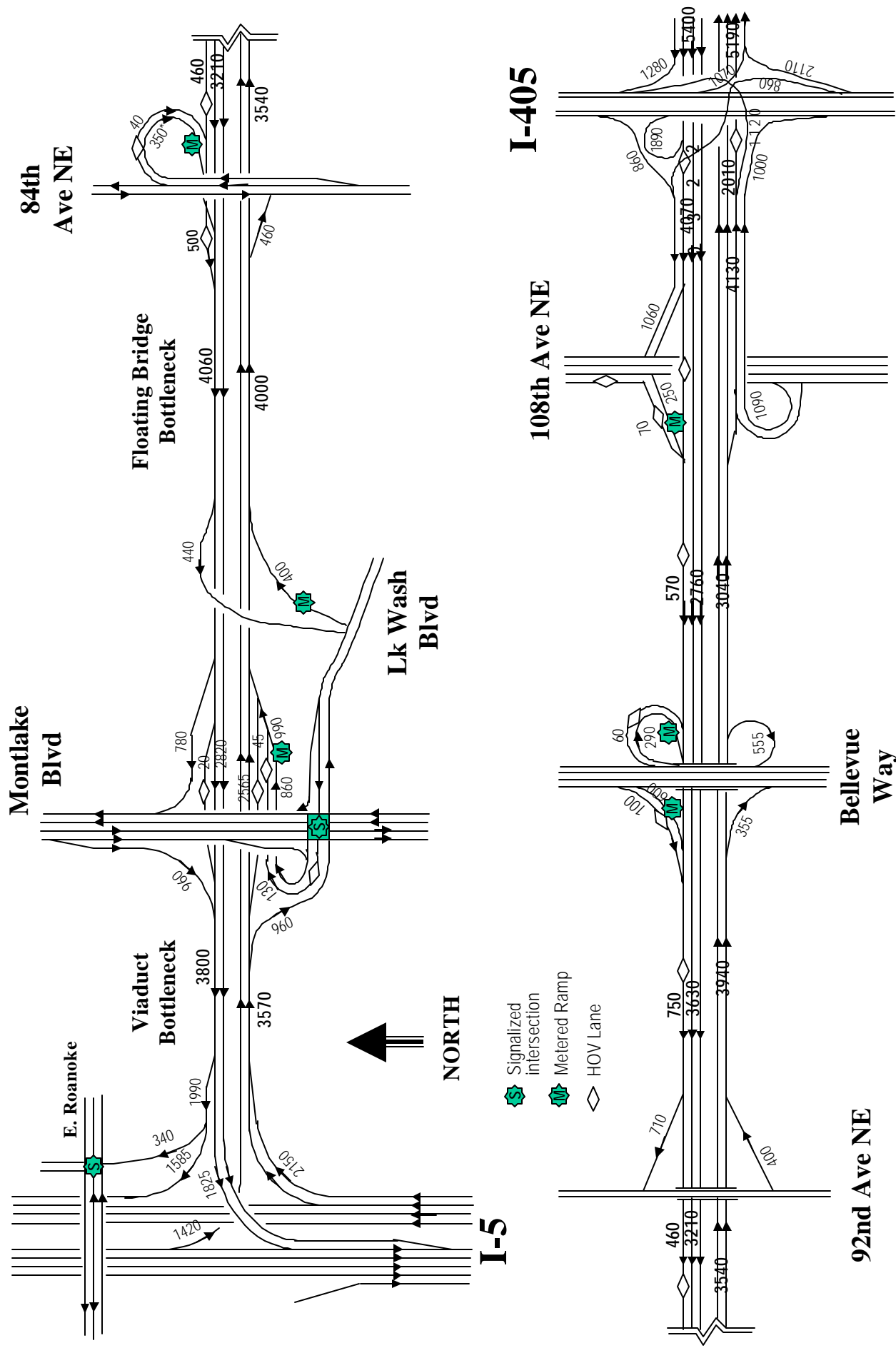
A Cost-effective Corridor Improvement Phase

Alternative 2 is a minimum action alternative that must be constructed in the SR-520 corridor. When the bridge, viaduct and other approach structures are reconstructed, they could be constructed to accommodate at least one additional lane in each direction in addition to the shoulder and bike/ped widening – nearly all over-water construction. The added width could accommodate the added auxiliary lanes illustrated on the second attachment. The bridge and viaduct capacities would be increased by 50%. The corridor capacity bottleneck would be eliminated. No widening or reconstruction would be needed through Montlake.

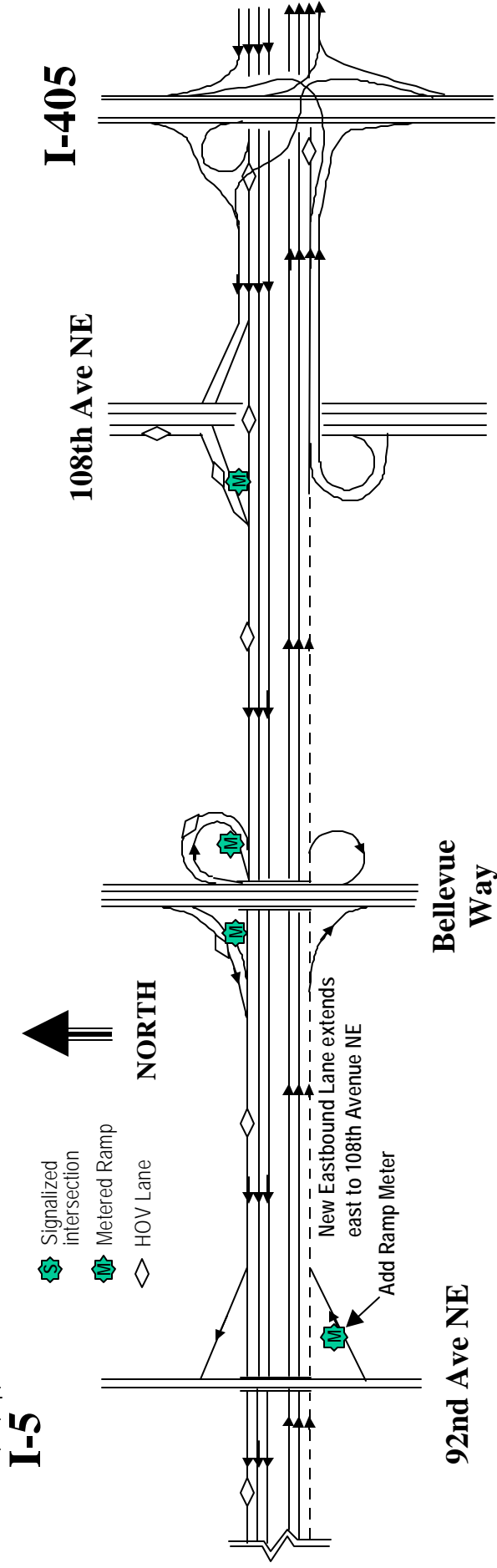
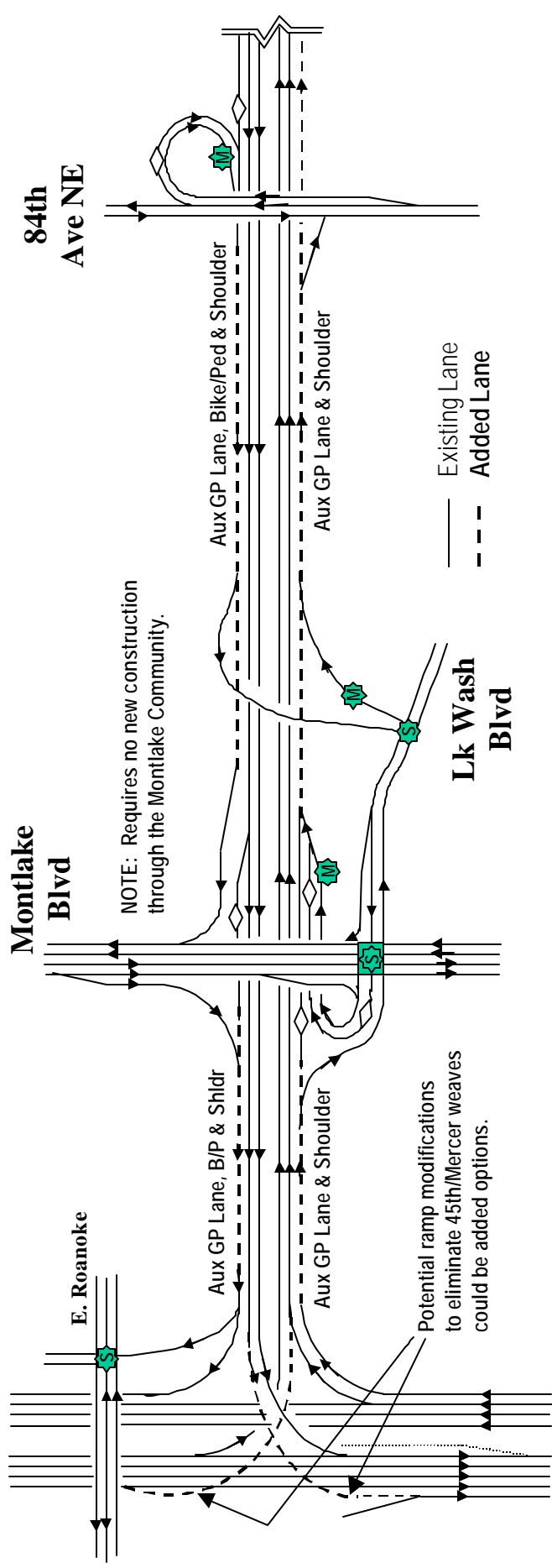
The added eastbound lane on the bridge would need to be extended through the Points communities to 108th Avenue NE where two lanes were already added with a recently completed corridor improvement. This is the only overland construction needed to balance out the corridor capacity under this phasing alternative.

By eliminating these corridor bottlenecks, all traffic flow between I-5 and I-405 could be maintained at high-speed by the existing ramp management system (ramp meters and HOV bypass lanes at on-ramps). There would be no need to restrict any lane between I-5 and the east end of the bridge for HOV use only – the bridge and viaduct would never be overloaded. The primary cause of the southbound congestion mess on Montlake Boulevard is the backups caused by severe traffic flow metering at the Montlake eastbound on-ramp. This ramp would be opened to nearly free-flow by the eastbound add-lane on the bridge.

It is guesstimated that this “phase” of corridor improvement could be carried out at a cost of between \$2.0 and \$2.5 billion. It would result in superior people-moving performance to all other alternative packages studied except Alternative 8. Wider pontoons and replacement bridge structures could be included if the ultimate alternative requires 8 lanes.



*Source: WSDOT 2000 Ramp & Roadway Traffic Volumes (Adjusted)



SR-520 Corridor: A “Phase 1 Action Plan”

(Balance Out Corridor Capacity)